

ABSTRACT OF THE DISCLOSURE

A method incorporating the use of a filter that accepts simultaneous masking signals and generates a close replica of temporal masking signals derived from the input simultaneous masking signals. The filter output is then added to the filter input to provide a composite masking signal. This composite masking signal may then be used to establish overall masking threshold levels which can be mapped in the appropriate subband to significantly reduce the amount of coding quantization required without significantly affecting the perceived sound of the reconstructed broadband signal.

The filter's transfer function and impulse response define a filter the output of which exhibits two principal characteristics of temporal masking. One such characteristic is decay with the logarithm of time. The other is a rate of decay that is inversely proportional to the duration of the corresponding simultaneous masking.

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